

The following claims are presented for examination:

1. (Previously Presented) An apparatus comprising:

pseudo skin;

a receiver, wherein said receiver receives an end effector through an insertion region in said pseudo skin; and

a first device for performing a first skin-interaction technique that is used in conjunction with a simulated vascular-access procedure, wherein the first skin-interaction technique is selected from the group consisting of palpation and occlusion and is performed on the pseudo skin at a first skin-interaction region of the pseudo skin, and further wherein:

(a) said receiver and said first device are disposed beneath said pseudo skin and are covered by said pseudo skin; and

(b) said insertion region of said pseudo skin is closer to a user than said first skin-interaction region of said pseudo skin when said user is using said apparatus.

2. – 3. (Canceled)

4. (Previously Presented) The apparatus of claim 1 further comprising a second device for performing a second skin-interaction technique on the pseudo skin at a second skin-interaction region of the pseudo skin, wherein said second device is disposed beneath said pseudo skin and is covered by said pseudo skin.

5. (Previously Presented) The apparatus of claim 4 wherein:

said second skin-interaction technique comprises skin stretching; and

said second skin-interaction region of said pseudo skin is closer to a user than said insertion region of said pseudo skin when said user is using said apparatus.

6. (Previously Presented) The apparatus of claim 1 further comprising a housing, wherein:

- (a) said receiver and said first device are contained within said housing;
- (b) said pseudo skin is substantially co-extensive with a surface of said housing;
- (c) said housing has an anterior portion and a posterior portion;
- (d) in use, said anterior portion is proximal to a user; and
- (e) said posterior portion is distal to said user.

7. (Previously Presented) The apparatus of claim 6 wherein an uppermost surface of said housing is no more than about 5 inches above a lowermost surface thereof.

8. – 12. (Canceled)

13. (Previously Presented) The apparatus of claim 6 further comprising a second device for performing a second skin-interaction technique on the pseudo skin at a second skin-interaction region of the pseudo skin, wherein said second device is disposed beneath said pseudo skin and is covered by said pseudo skin.

14. (Previously Presented) The apparatus of claim 13 wherein said second skin-interaction technique comprises skin-stretch.

15. (Original) The apparatus of claim 14 wherein at least some portion of said second device is closer to said anterior portion of said housing than said first device.

16. (Original) The apparatus of claim 14 wherein at least some portion of said second device is closer to said anterior portion of said housing than said first end of said receiver.

17. (Original) The apparatus of claim 14 wherein said first end of said receiver is closer to said anterior portion of said housing than said first device.

18. (Previously Presented) The apparatus of claim 14 wherein an uppermost surface of said first device extends a greater distance above a lowermost surface of said housing than said first end of said receiver.

19. (Previously Presented) The apparatus of claim 14 wherein an upper-most surface of said first device extends further above a lowermost surface of said housing than an upper-most surface of said second device.

20. (Canceled)

21. (Previously Presented) The apparatus of claim 6 further comprising an electronics/communications interface, wherein:

said electronics/communications interface receives signals from sensors that are associated with at least one of said first device or said receiver; and

said electronics/communications interface is disposed beneath said pseudo skin and is covered by said pseudo skin.

22. (Original) The apparatus of claim 21 wherein said electronics/communications interface is closer to said posterior portion of said housing than said first device.

23. (Original) The apparatus of claim 21 wherein said electronics/communications interface is closer to said posterior portion of said housing than said receiver.

24. (Original) The apparatus of claim 21 wherein said electronics/communications interface comprises a printed circuit board, and further wherein a major surface of said printed circuit board is disposed orthogonal to an uppermost surface of said first device.

25. (Previously Presented) An apparatus comprising:

a housing, wherein said housing has an opening in an uppermost surface thereof;
pseudo skin, wherein said pseudo skin covers said opening;
an end effector, wherein said end effector is inserted into said housing through said pseudo skin during the performance of a simulated vascular-access procedure; and
a plurality of mechanisms, wherein said plurality of mechanisms are contained completely within said housing and are covered by said pseudo skin, and wherein said plurality of mechanisms include:

- (a) a first mechanism is for simulating a skin-stretch technique that is used in conjunction with a simulated vascular-access procedure and is performed on said pseudo skin; and
- (b) a second mechanism for receiving said end effector.

26. – 27. (Canceled)

28. (Previously Presented) The apparatus of claim 25 wherein said mechanisms includes a third mechanism for simulating at least one of a palpation or an occlusion technique that is used in conjunction with a simulated vascular-access procedure and is performed on said pseudo skin, and wherein said end effector is at least one of either a needle or a catheter.

29. – 32. (Canceled)

33. (Previously Presented) The apparatus of claim 28 wherein said housing has an anterior end and a posterior end, wherein in use, said anterior end is proximal to a user, and wherein a portion of said second mechanism is flanked by said first mechanism proximal to said anterior end and said third mechanism proximal to said posterior end.

34. (Previously Presented) The apparatus of claim 28 wherein:
a user interacts with said first mechanism at a first site on said pseudo skin;
said user interacts with said second mechanism at a second site on said pseudo skin;
and
said user interacts with said third mechanism at a third site on said pseudo skin;
and
locations of each of said first site, second site, and third site on said pseudo skin correspond to locations of said first mechanism, second mechanism, and third mechanism, respectively, within said housing.

35. (Currently Amended) An apparatus comprising:
a pseudo skin;
a plurality of mechanisms with which a user interacts for simulating a vascular-access procedure, including at least one mechanism for performing a non-invasive skin-interaction technique that is performed on said pseudo skin, wherein said plurality of mechanisms are disposed under said pseudo skin and are covered by said pseudo skin; and
a housing, wherein said housing contains said plurality of mechanisms.

36. (Original) The apparatus of claim 35 wherein said housing is no more than about 5 inches in height.

37. (Original) The apparatus of claim 35 wherein said housing is no more than about 4 inches in height.

38. (Original) The apparatus of claim 35 wherein at least one of either a needle or catheter is disposed outside of said housing until inserted therein during a simulated vascular-access procedure.

39. (Original) The apparatus of claim 35 further comprising a data processing system, wherein said data processing system receives signals from sensors that are associated with said plurality of mechanisms.

40. (Original) The apparatus of claim 35 wherein said plurality of mechanisms comprise discrete devices, wherein a first of said devices is for enabling a user to perform a skin-stretch technique, a second of said devices is for receiving a needle or catheter or both, and a third of said devices is for enabling a user to perform at least one of either a palpation technique or an occlusion technique.